

CLAIMS

1. A disk playback device capable of reproducing
signals from a disk by irradiating the disk with a laser
5 beam from an optical head, the disk playback device
comprising a laser drive circuit capable of feeding a drive
signal to the optical head and adjusting a power of the
laser beam irradiated by the optical head and a control
circuit for controlling operation of the laser drive
10 circuit, wherein the control circuit comprises reproduction
power optimizing means for repeatedly optimizing the power
of the laser beam for signal reproduction, and the
reproduction power optimizing means comprises:

evaluation data detecting means for detecting
15 evaluation data representing quality of a signal
reproduction state;

retrieving means for retrieving one boundary value of
two boundary values of a reproduction power wherein the
evaluation data is a prescribed value or in the vicinity of
20 the prescribed value; and

optimum reproduction power calculating means for
calculating an optimum reproduction power based on the one
boundary value retrieved,
wherein the retrieving means retrieves a new boundary value

based on a boundary value obtained by a previous optimizing processing.

2. A disk playback device according to claim 1,
wherein the retrieving means retrieves a lower boundary
5 value having a smaller value from the two boundary values,
and the optimum reproduction power calculating means adds a
predetermined value to the lower boundary value to thereby
determine the optimum reproduction power.

3. A disk playback device according to claim 1 or 2,
10 wherein the evaluation data is a frequency of occurrence of
bit errors included in a reproduced signal.

4. A disk playback device according to any one of
claims 1 to 3, wherein the disk playback device comprises
temperature detecting means for detecting a temperature of
15 the disk, and the reproduction power optimizing means
optimizes the reproduction power whenever the temperature
of the disk varies by a predetermined temperature.